

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
9 June 2005 (09.06.2005)

PCT

(10) International Publication Number
WO 2005/052167 A2

(51) International Patent Classification⁷: C12N 15/64

(21) International Application Number:
PCT/GB2004/004929

(22) International Filing Date:
22 November 2004 (22.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0327056.8 20 November 2003 (20.11.2003) GB

(71) Applicant (for all designated States except US): **COBRA BIOLOGICS LIMITED** [GB/GB]; Stephenson Building, Keele University Science Park, Keele ST5 5SP (GB).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **CRANENBURGH, Rocky, Marc** [GB/GB]; Cobra Biologics Limited, Stephenson Building, Keele University Science Park, Keele ST5 5SP (GB).

(74) Agents: **HALLYBONE, Huw, George** et al.; Carpmals & Ransford, 43-45 Bloomsbury Square, London WC1A 2RA (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

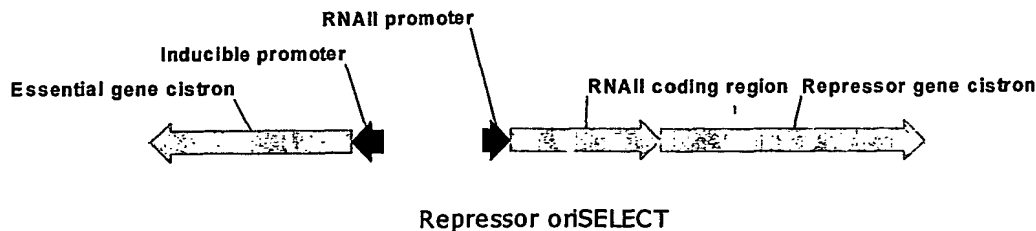
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PLASMID MAINTENANCE



(57) Abstract: The invention relates to a system for stable maintenance of a plasmid, to host cells for use in this system and to methods of using the system to obtain a plasmid useful in medical applications. In particular, the invention provides a method for stable maintenance of a plasmid in a host cell *in vivo*.